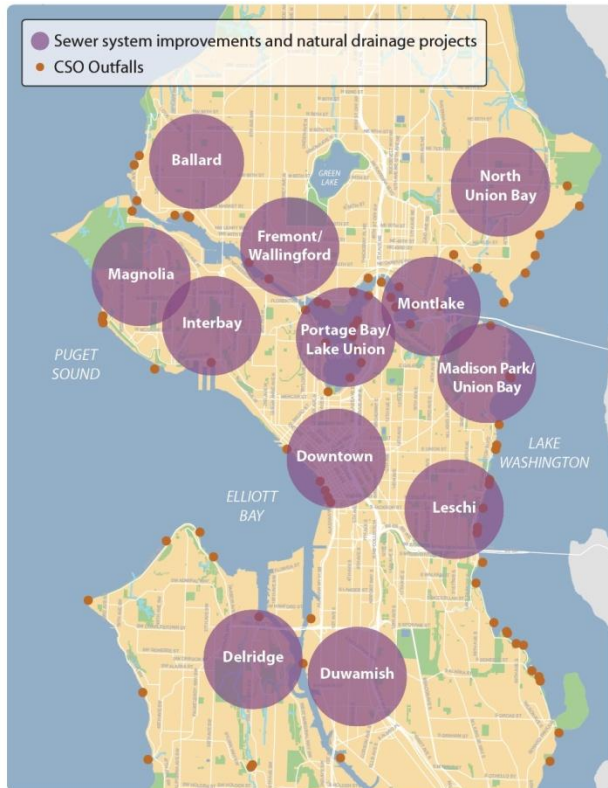


Seattle's Strategy to Prevent Sewage Overflows



During heavy rains, pipes that carry a combination of untreated stormwater and raw sewage can overflow into our waterways — threatening the quality of our creeks, lakes, rivers, and Elliott Bay. These overflows are called “Combined Sewer Overflows” or CSOs.

Seattle’s combined sewers overflow into local waterways an average of 318 times per year during wet weather. In 2010, 190 million gallons of untreated raw sewage and stormwater discharged at 47 of the 90 outfalls managed by Seattle Public Utilities (SPU).

To protect public health and the environment and meet state and federal regulations, SPU is creating a Long-Term Control Plan, a comprehensive strategy to reduce CSOs to an average of no more than one per outfall per year. The Long-Term Control Plan, implemented after 2015 through 2025, will identify the general location, strategy, size, and number of facilities to reduce CSOs throughout the city.

Scoping is the first step in the environmental review process, and the comment period runs from September 26, 2011 to November 7, 2011. [Click here for details](#). The purpose of scoping is to determine the range of issues to study in the project’s state

mandated environmental review document.

A Combined Strategy to Reduce Overflows

SPU proposes to use a combination of three strategies to meet our program goals — sewer system improvements, natural drainage solutions, and underground storage.

1. Fix it First: Sewer System Improvements

In some areas, SPU can reduce CSOs by making minor modifications to the existing system to make it more efficient. Examples include adjusting the height of gates that control stormwater once it is in the system, or increasing maintenance and monitoring activities.

2. Keep Stormwater Out: Natural Drainage Solutions

Natural drainage solutions include a variety of measures that use soil to absorb stormwater and slow the rate that it enters the sewer system. Examples include:

- Rain garden — a garden area on private or public property with deep, compost-amended soils and plants that temporarily hold runoff from roofs, streets, and sidewalks.
- Porous pavement — pavement that allows stormwater to filter through and slowly seep into the native soil rather than enter the sewer system.

- Cistern – a large barrel that temporarily holds 200-1,000 gallons or more of rainwater during a storm. When the storm passes, and sewer capacity is normal, the water is drained to the sewer system.

3. Store What's Left: Underground Storage

Underground storage facilities temporarily hold combined sewage and stormwater during a storm, when there is less capacity available in the combined sewer system. When the storm passes and capacity is available, the facility gradually sends flows to the downstream sewer system for treatment and discharge.

Underground storage will be needed in some neighborhoods to address the remaining volume that cannot be reduced through sewer system improvements and natural drainage projects.

Storage facilities can be in the form of tanks, pipes, or tunnels. In general, tanks and tunnels are used to hold larger volumes while pipes are appropriate for smaller amounts. In some neighborhoods, Seattle Public Utilities may only need to build one larger underground facility, and in other areas, it may be more appropriate to build two or three smaller ones within a neighborhood.

Check out the [Community Guide to the Plan](#), and learn the details for the three alternatives.